

REMARKSInterview request

Applicants respectfully request a telephonic interview after the Examiner has reviewed the instant response and amendment. Applicants request the Examiner call Applicants' representative, as noted below.

Status of the Claims*Pending claims*

Claims 1, 14, 15, 29, 33, 35, 40, 42 to 45, 48, 49, 51, 54, 56, 58, 87, 106, 107, 111, 113, 116, 138, 143, 174, 175, 177, 182, 184, 187 to 190 and 192 to 228 are pending. [Applicants note claim 42 remains pending, but is withdrawn (falls within RR Group II)].

Claims 42, 51, 54, 56, 58, 106, 107, 111, 113, 116, 138, 143, 174, 175, 177, 182, 184, 187, 190, 208 to 216 and 221, to 224 were withdrawn.

Accordingly, claims 1, 14, 15, 29, 33, 35, 40, 43 to 45, 48, 49, 87, 188, 189, 192 to 207, 217 to 220 and 225 to 228, are pending and under consideration.

Claims canceled or added in the instant amendment

Claims 193 to 202 and 209 to 214, are canceled without prejudice or disclaimer. Claims 229 and 231 have been added. Thus, after entry of the instant amendment claims 1, 14, 15, 29, 33, 35, 40, 43 to 45, 48, 49, 87, 188, 189, 192, 203 to 207, 217 to 220, 225 to 231 will be pending and under consideration.

Outstanding Rejections

Claims 1, 14, 15, 35, 40, 43 to 45, 48, 49, 87, 188, 193 to 207, 217 to 220 and 226 to 228, are rejected under 35 U.S.C. § 112, first paragraph, written description requirement. Claims 1, 14, 29, 33, 35, 188, 189 and 192 to 201 are rejected under 35 U.S.C. §102(a), as allegedly anticipated by GenBank Accession no. AF401282, Lesser. Claims 1, 15, 29, 33, 35, 40, 43 to 45, 48, 49, 87, 188, 189, 192 to 200 and 225 to 228, are rejected under 35 U.S.C. §102(b), as allegedly anticipated by Lukyanov, WO 01/27150. Claims 1, 14, 15, 29, 35, 40, 43 to 45, 48, 49, 188, 189, 192 and 198, are rejected under 35 U.S.C. §102(b), as allegedly anticipated by Tsien, et al., 6,140,132. Claims 217 and 218, were alleged to be unpatentable under 35 U.S.C. §103(a) over Lukyanov in view of Short, et al., WO 00/77262.

Applicants respectfully traverse all outstanding objections to the specification and rejection of the claims.

Support for the claim amendments

The specification sets forth an extensive description of the invention in the new and amended claims. For example, support for claims drawn to a genus of nucleic acids or polypeptides having various sequence identities over various lengths can be found, inter alia, on the paragraph spanning pages 35 to 36; or, the paragraph spanning pages 37 to 38; paragraphs [0109] and [0117], of U.S. Patent Application Publication No. 20040180378 (the “378 publication). Accordingly, no new matter has been added by way of these amendments.

The Group and Sequence Restriction Requirement (RR) – and Election

The Office alleged that the pending claims are directed to nineteen (XIX) separate and distinct inventions under 35 U.S.C. §121, and Applicants were required to elect a single exemplary nucleic acid or polypeptide for examination. In response, Applicants elected Group I, drawn to, inter alia, nucleic acids, probes, amplification primer pairs, etc., with traverse. In response to the sequence RR, Applicants elected the genus based on the exemplary nucleic acid of the invention SEQ ID NO:29. Applicants requested the Office rejoin Groups III, IV, and XI to the elected Group I (nucleic acids, vectors, transformed cells, etc.), and set forth reasons for their traversal.

After the elected product claims have been found to be allowable, all withdrawn process (methods) claims which depend from or otherwise include all of the limitations of the allowed product claims should be rejoined. MPEP §821.04; pg 800-63, 8th Edition, August 2001; In re Ochiai, 37 USPQ2d 1127 (Fed. Cir. 1995); In re Brouwer, 37 USPQ2d 1663 (Fed. Cir. 1995); 1184 OG 86, 3/26/96.

Claim objections

Claims 219 and 220 are objected to for reasons set forth in paragraph 4, on page 4, of the OA. In particular, it is alleged that claims 219 and 220 recited non-elected sequences. The instant amendment addresses this issue.

However, Applicants wish to note that because claim 220 is a “further comprising” claim, any composition (having sufficient support in the specification, of course), including any additional sequence, can be “further added” to the initially claimed composition (which is limited by the sequence election), whether or not that “further comprising” sequence was initially elected in the restriction requirement.

Applicants also respectfully aver that because claim 221 encompasses a genus of sequences based on the exemplary elected SEQ ID NO:29:

Claim 221 (withdrawn – currently amended): A method for making a nucleic acid encoding a fluorescent protein comprising the following steps:

(a) providing a template nucleic acid comprising at least the [[a]] sequence of as set forth in claim 1; and

(b) generating a recombinant nucleic acid encoding a fluorescent protein by subjecting the template nucleic acid to Synthetic Ligation Reassembly (SLR).

... then claims encompassing exemplary sequences falling within the scope of that claimed (and elected) genus should remain within the elected restriction group and should remain pending.

Issues under 35 U.S.C. §112, first paragraph, written description requirement

Claims 1, 14, 15, 35, 40, 43 to 45, 48, 49, 87, 188, 193 to 207, 217 to 220 and 226 to 228, are rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention, as discussed in paragraph 5, on pages 4 to 6, of the OA.

In particular, it is alleged, inter alia, that the specification fails to describe a representative number of species of a “very large” genus (see, e.g., page 5, first full paragraph, of the OA). The instant amendment addresses this issue, with the amended claims now directed to a genus of polynucleotides having at least 75% (versus 50%) sequence identity to the exemplary SEQ ID NO:29 over at least 700 contiguous residues.

Applicants also respectfully note that the specification provides several exemplary species that fall within the scope of the claimed genus (based on SEQ ID NO:29), thus providing a “representative number” of species to describe the claimed genus, particularly after entry of the instant amendment, which significantly narrowed the scope of the elected genus of nucleic acids. For example, see claims 215, 216, 220, 224, and 229, which recite exemplary sequence species within the scope of the claimed genus of nucleic acids.

Issues under 35 U.S.C. §102*§102(a) and Lesser*

Claims 1, 14, 29, 33, 35, 188, 189 and 192 to 201 are rejected under 35 U.S.C. §102(a), as allegedly anticipated by GenBank Accession no. AF401282, Lesser, Aug. 5, 2001 (hereinafter "Lesser"), as described in detail in paragraph 7, on pages 7 to 10, of the OA. In particular, it is alleged that Lesser described a sequence having 70.1% sequence identity to the exemplary SEQ ID NO:29 over 683 residues.

The legal standard for anticipation under 35 U.S.C. §102 is one of strict identity. To anticipate a claim, a single prior source must contain each and every limitation of the claimed invention. In re Paulson, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994)(citing In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990)). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). MPEP §2131; pg 2100-76, 8th ed., Rev. 3, August 2005.

The instant amendment addresses this issue. After entry of the instant amendment, the claimed invention will encompass a genus of nucleic acids having at least 75% sequence identity to the exemplary SEQ ID NO:29 over at least 700 contiguous residues. Accordingly, because Lesser is not a single prior source that contains each and every limitation of the claimed invention, the rejection under section 102(a) under Lesser can be properly withdrawn.

§102(b) and Lukyanov, WO 01/27150

Claims 1, 15, 29, 33, 35, 40, 43 to 45, 48, 49, 87, 188, 189, 192 to 200 and 225 to 228, are rejected under 35 U.S.C. §102(b), as allegedly anticipated by Lukyanov, WO 01/27150, published April 19, 2001 (hereinafter "Lukyanov"), as described in detail in paragraph 8, on pages 10 to 17, of the OA..

The instant amendment addresses this issue. After entry of the instant amendment, the claimed invention will encompass a genus of nucleic acids having at least 75% sequence identity to the exemplary SEQ ID NO:29 over at least 700 contiguous residues. Accordingly, because

Lukyanov is not a single prior source that contains each and every limitation of the claimed invention, the rejection under section 102(b) under Lukyanov can be properly withdrawn.

§102(b) and Tsien

Claims 1, 14, 15, 29, 35, 40, 43 to 45, 48, 49, 188, 189, 192 and 198, are rejected under 35 U.S.C. §102(b), as allegedly anticipated by Tsien, et al., 6,140,132, issued October 31, 2000, (hereinafter “Tsien”), as described in detail in paragraph 9, on pages 18 to 24, of the OA.

The instant amendment addresses this issue. After entry of the instant amendment, the claimed invention will encompass a genus of nucleic acids having at least 75% sequence identity to the exemplary SEQ ID NO:29 over at least 700 contiguous residues. Accordingly, because Tsien is not a single prior source that contains each and every limitation of the claimed invention, the rejection under section 102(b) under Tsien can be properly withdrawn.

Issues under 35 U.S.C. §103

Lukyanov in view of Short

Claims 217 and 218, were alleged to be unpatentable under 35 U.S.C. §103(a) over Lukyanov in view of Short, et al., WO 00/77262 (hereinafter “Short”), as described in detail in paragraph 10, on pages 25 to 27, of the OA.

The instant amendment addresses this issue. After entry of the instant amendment, the claimed invention will encompass a genus of nucleic acids having at least 75% sequence identity to the exemplary SEQ ID NO:29 over at least 700 contiguous residues. Lukyanov neither teaches nor suggests this genus of nucleic acids, and Short does not cure this defect in Lukyanov. Accordingly, because the cited art Lukyanov and Short do not teach or suggest the claimed invention, the rejection under section 103(a) can be properly withdrawn.

CONCLUSION

In view of the foregoing amendment and remarks, Applicants respectfully aver that the Examiner can properly withdraw the rejection of the pending claims under 35 U.S.C. §112, first paragraph; 35 U.S.C. §102; and, 35 U.S.C. §103(a). In view of the above, claims in this application after entry of the instant amendment are believed to be in condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. **564462005300**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

As noted above, Applicants have requested a telephone conference with the undersigned representative to expedite prosecution of this application. After the Examiner has reviewed the instant response and amendment, please telephone the undersigned at 858 720-5133.

Dated: October 10, 2006

Respectfully submitted,


By _____

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